St. Marys River EWN Water Operations Projects

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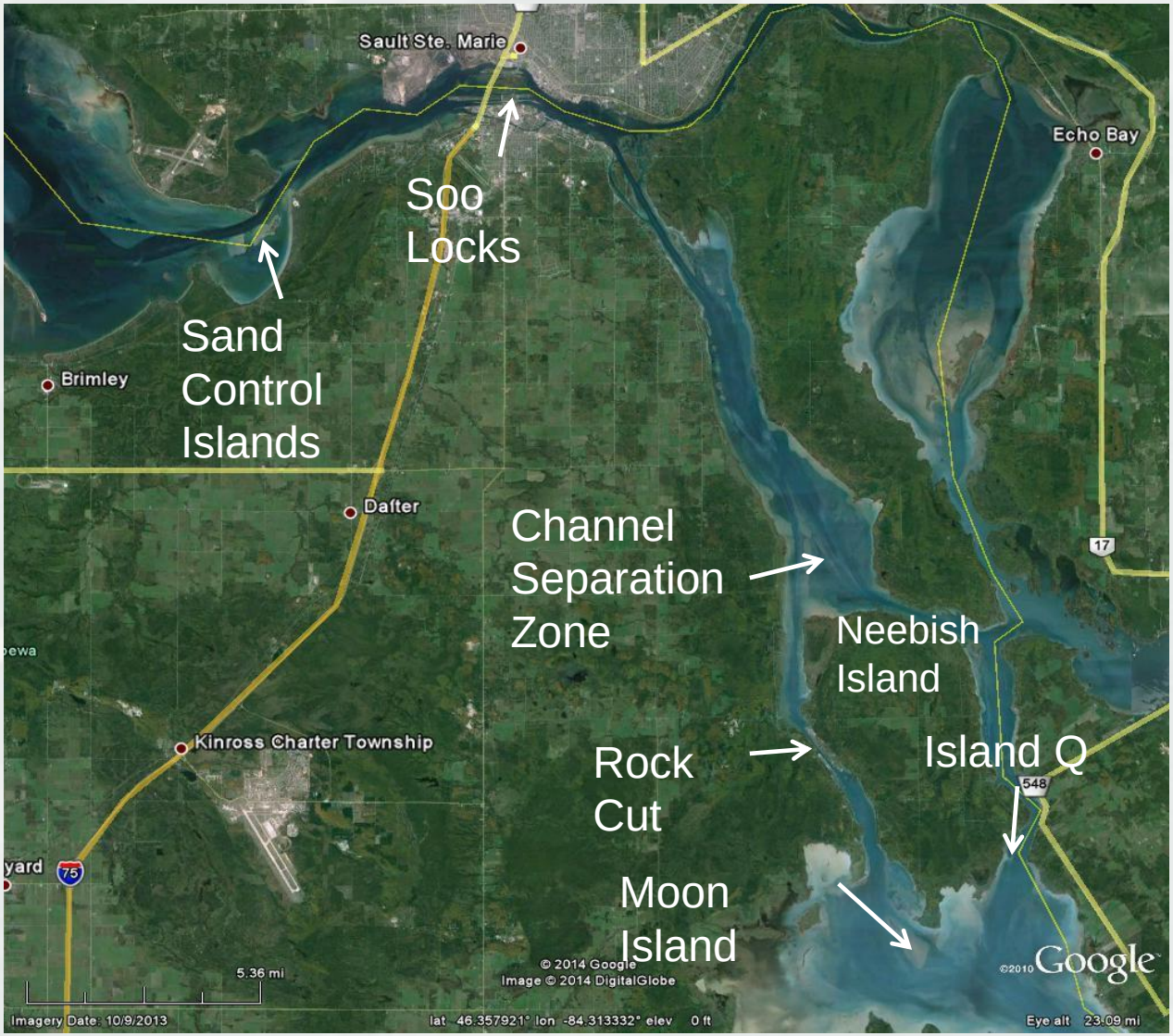
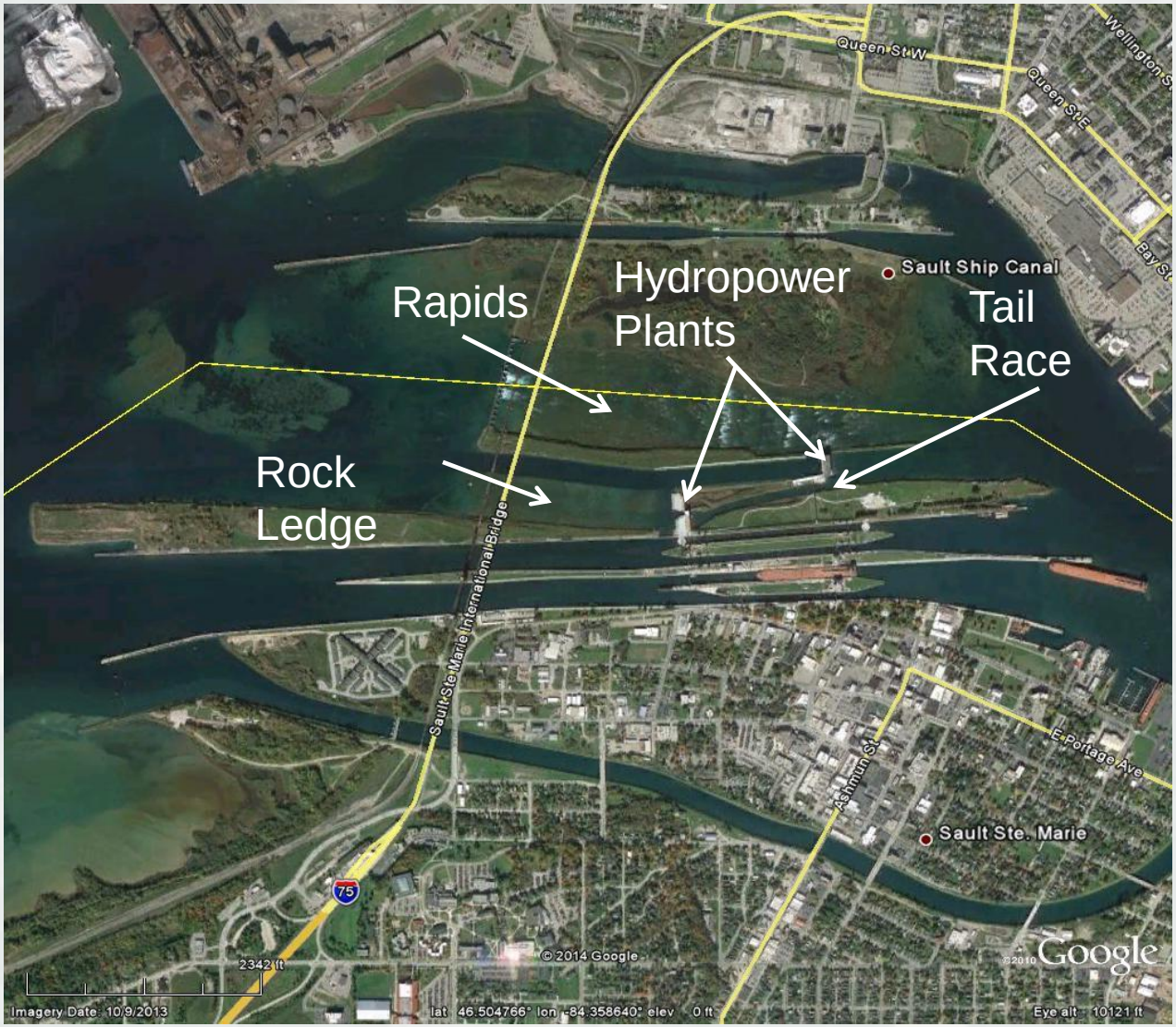
US Army Corps of Engineers
BUILDING STRONG®

St. Marys River EWN Prospective Projects

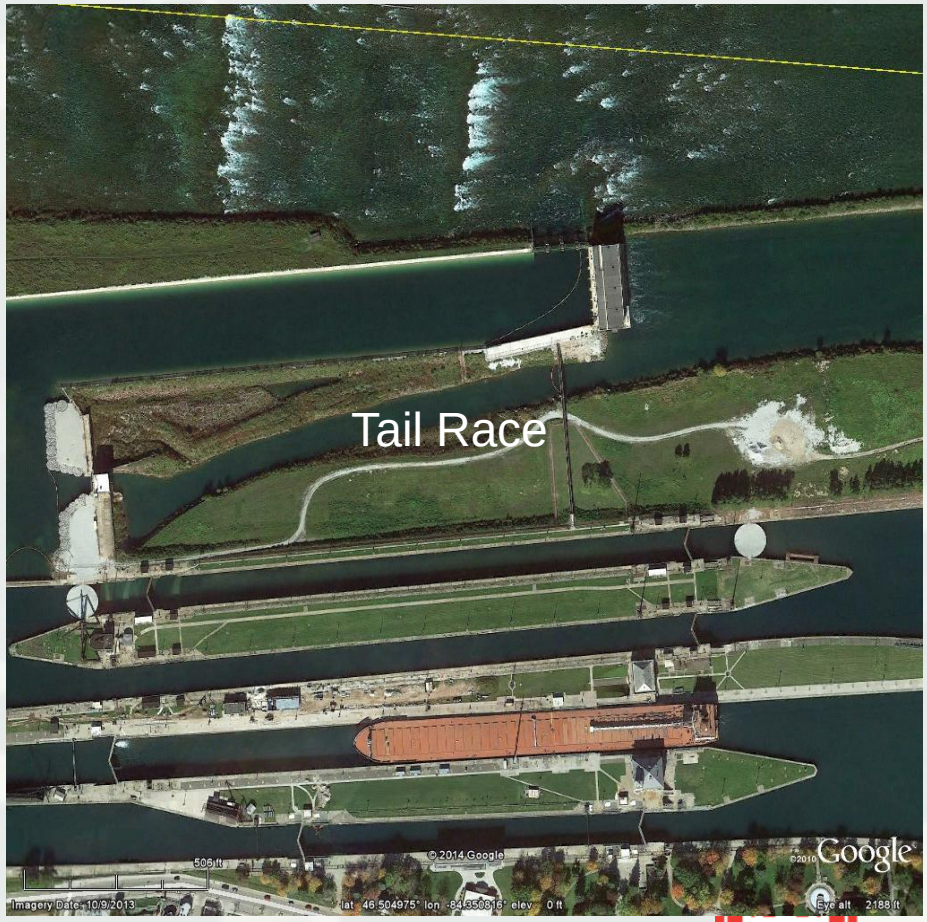


Soo Locks EWN Prospective Projects



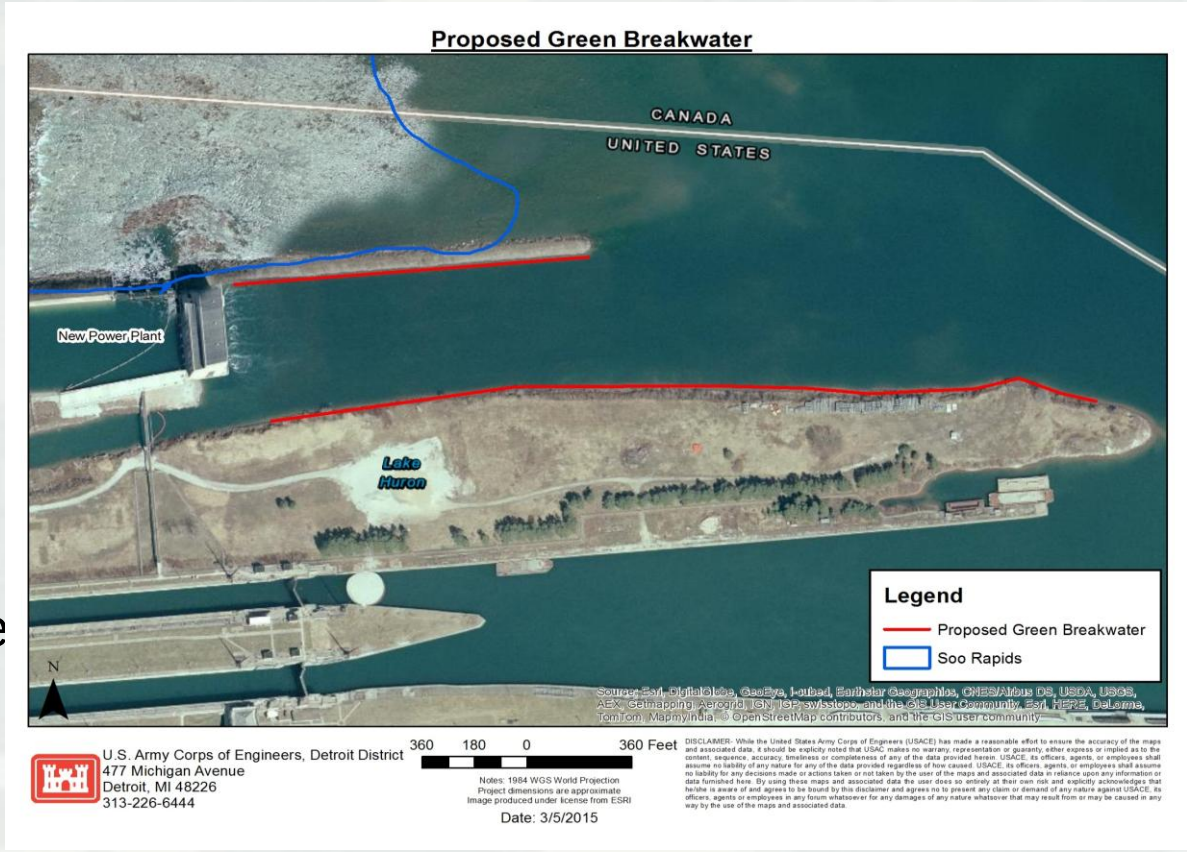
Creating Fish Spawning Habitat using Dredged Rock in Hydropower Tail Race

- Create a fish spawning bed in hydropower plant tailrace
- Use dredged rock material of appropriate size to create spawning ridges and swales within the tailrace area of the small hydropower plant
- Area routinely experiences currents (3-4 ft/sec) serving as spawning habitat for species that prefer such conditions, particularly the lake sturgeon
- Only known Atlantic salmon spawning habitat in MI



Lake Sturgeon Spawning Habitat Creation

- Creation of roughly 2,000 linear feet of habitat
- About 20,000 ft^2 or 0.5 acres
- Lake sturgeon requires flow of roughly 2-5 ft/sec for spawning
- Will create rare spawning habitat that is otherwise absent in other parts of the St. Marys River during the spring runoff
- (Except at the bottom of the navigation channel where fish do not occur)

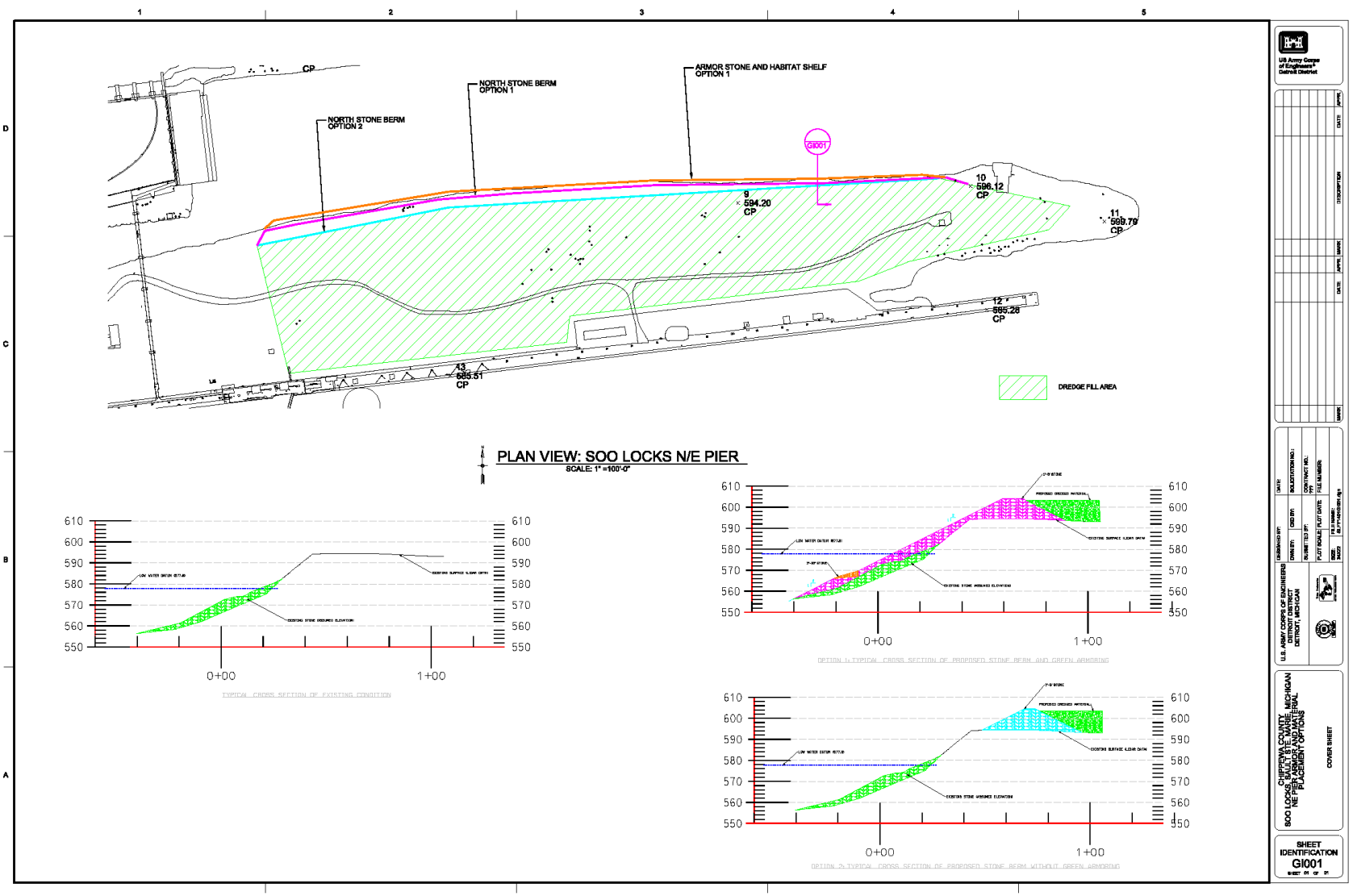


Ready Supply of Rock

- USACE O&M funding used to harvest and separate rock during annual dredging at the rock cut (within watershed)
- Rock will be used to supplement existing rock present to maximize its use as a fish spawning base

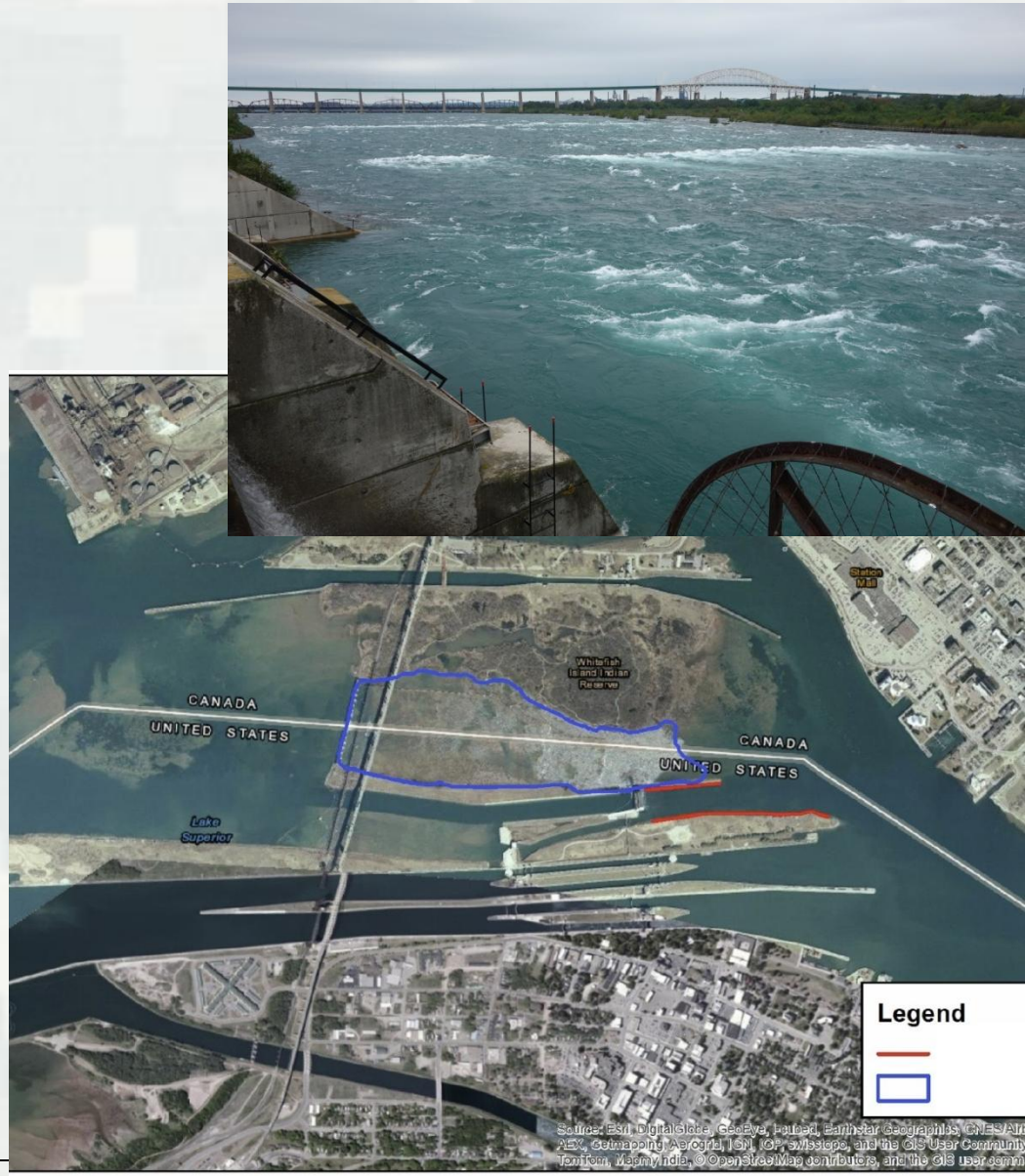
- H&H modeling needed to verify a rock fish spawning design that would not affect hydropower production
- O&M funds are already in place to transport and place the rock for armoring

Spawning Bed Design



St. Marys Compensating Works Gate Study

- International Lake Superior Board of Control study for developing gate change rate limit at Comp Works in St. Marys River
- New IJC directive to minimize risk to fish and other aquatic animals from being flushed or stranded in the rapids
- Spurred Spawning Restoration project proposal through EWN
- Board has shifted gate operations from full center gates open to multiple gates open partially across the entire span



Outreach Opportunities

- Unique outreach opportunity
- Visitors Center at Soo Locks
- Owned and operated by USACE
- Create EWN display
- 500,000 visitors/year
- Engineers Day (last Friday in June) locks open to the public

Questions?